# A SHORT ANSWER TO A LATE PAMPHLET AGAINST Doctor *Pitcairn's* DISSERTATIONS.

By *J. J.* M. D.

EDINBURGH,
Printed for *Thomas Carruthers*, 1702.

MVSEVM
BRITAN
NICVM

# A SHORT ANSWER TO A LATE PAMPHLET.

I Was Surpriz'd the other Day to meet with a Pamphlet, containing ſome ſcurvy Reflections on Dr. *Pitcairn*'s Diſſertations; which for ſeveral Years had ſtood the Teſt of all *Europe*, and were approven and highly applauded by all Men of Senſe and Learning, except ſome little Pretenders here, who made ſome faint Eſſay's and ineffectual Struggles, which ſerved only the more to confirm the Truth of them, and expoſe themſelves.

But I was ſtill more amaz'd, after all this to ſee nothing in this Pamphlet, but Pedantick Punns, ſilly Kibbaldry, and oft times non-ſenſe. The Author, I ſuſpect, is one who was rais'd to Reputation before he had a fund to maintain it, got buſineſs before he could well manage it, unduely leap'd in before men of far better Senſe and greater Ingenuity, and at laſt by the Vanity of his Temper began to Imagine himſelf an Hero; and would needs grapple with a man far above his Strength: But ſome People have Fancie'd themſelves *Heroes* who were not; and others have miſtaken their ſtrength, and ſo in both caſes come off but Scurvily. It is Written in Latin, to amuſe ſome good meaning People, who neither throughly underſtand the Language, nor ſubject, to whom for ſeveral Moneths paſt, He has been Reading ſome Sentences he thinks very fine, on purpoſe to wound D. *P*, ſecretly, and wheedle himſelf into Imployment. But D. *P*'s Reputation is ſo well known, and firmly eſtabliſhed among

all the Learn'd men of *Europe*, and his practise in Physick is justly so great in this Kingdom, that he needs not be affrai'd either to lose the one or the other. I do not think it fit to make my answer in the same Language, because it is generally an unknown Tongue. To write in Latin is only necessary for the Learn'd men abroad, and it would be a disparagement to their Judgements, to think they expected any answer to such trivial Objections. Besides, D. *P.* (whose excellent compositures both in Prose and Verse show him to be an absolut Master of that Language) will do himself right, if it be thought convenient. I shall not then deal behind the Curtain, or keep things in secret, but in plain Language I shall set the objections or Accusations in a clearer Light, and give such answers as (I think) may satisfie any Reader.

I cannot but in the first place take notice of the Style, which is Stiff, affected and unequal: it's such as one would have expected from some little

School

School Master, who has pick'd Sentences out of his Phraſe Book, and Jumbled them together without any kind of ſenſe. As for example, he ſays D. P. got his Reputation *apud Congerrones, omniumq; horarum Homines.* Now every body knows *Congerrones* ſignifies idle clatterers, and is allways taken in a bad ſenſe: whereas *Omnium horarum Homines* is uſed in a very good meaning, for *Quintilian* ſays of *Aſinius Pollio*, that he was *Omnium horarum Homo, i. e.* as he explains it, *Serijs jociſq; aquè accommodatus.* This is indeed ſetting down *Phraſes* without having the ſenſe to joyn them, and is a way of ſpeaking only proper for Pedants and Mountibanks, who would appear Learned to the Ignorant.

Our Author objects againſt D. P. that he is a Plagiary, and has taken all his Diſſertations out of *Borelli, Bellini*, and ſome others; and that theſe contain nothing uſeful, or for the Improvement of Medicine; if there be nothing uſeful in them, and theſe

alſo

also taken from *Borelli* and *Bellini*, I think *Borelli* and *Bellini* should be accused no less than D. P. Now let us see, how he makes out his charge. He says indeed that D. P. has taken several things from *Borelli* and *Bellini*, but no where proves it. Our Author (it seems) thinks, that, because D. P. quotes frequently these Authors, he has taken all from them; But does it follow, because Dr. *Gregory* does cite *Euclid*'s *Elements* in his *Opticks* and *Astronomy*, that he has stolen all his *Opticks* and *Astronomy* out of *Euclide*? I wish the Dissertator would turn Plagiary at this rate.

Our Author in his examination of D. P's first Dissertation, *De circulatione Sanguinis per vasa minima*, confesses D. P. has demonstrated the circular Figure of the Vessels, which teaches us the business of Secretion: and every body (except the Dissertator) knows how useful this is in the Animal œconomy, and the cureing of Diseases. He also acknowledges D. P. has demonstratively destroyed a fermentation

in

in the ſtomach, about which *Willis*, *Etmuller*, and all the *German* Authors have written ſo many Books, and ſpoke ſo much unintelligible gibbriſh. But ſays the Diſſertator, this alſo is of no uſe in the Practice of Medicine: I ſuppoſe he will make the Circulation of the Blood of no uſe likeways, for I'm confident the Practice of Phyſick is not ſo much altered by that Invention, as by deſtroying Fermentation in the Stomach. But the ſtreſs of the whole matter lyes here; ſome of our Authors acquaintances uſed ordinarly to ſtuff their Bills with ſpecificks to correct or reſtore the Ferment of the Stomach as they call it: Now behold D. *P.* has defeated this Fermentation, and therefore muſt it be reckon'd of no uſe, becauſe forſooth it has ſpoil'd the Trade of Phyſick, as it has been managed by theſe Gentlemen. They have then very good reaſon to be angry, ſince they will hereby both loſe their Intereſt, and have nothing to ſay.

Next the Diſſertator diſcovers, that *Bellini* knew the Veins and Arteries to

be

be continuous: Doth this prove D. P's demonstrations to be false or useless? But says he, this is the foundation of D. P's discourse. In this he's mistaken, and tho' that were true, is not D. *Harvey's* Doctrine of the Circulation of the Blood the ground of all *Borelli's* and *Bellini's* inventions? are they therefore either useless or stolen? I must tell our Author that neither *Bellini* nor *Borelli* ever demonstrated the continuity of Veins and Arteries, the knowledge of which is so useful, that without it the Doctrine of the Circulation was imperfect and involved in unexplicable difficulties.

He proceeds now to examine the second Dissertation: and seems to own, that the Air does not mix with the Blood in the Lungs, which manifestly follows from the continuity of the Arteries and Veins first demonstrated by D. P. Now the common Cant is again repeated, What Advantage brings this to Medicine? Its hard to be obliged to Instruct the Dissertator at every turn, when with the least attention

he might have deduced it from the dissertation it self: But in a word, if the Air mix with the Blood in the Lungs, no Animal could live one moment out of his mothers Belly, as D. P. has clearly proven, tho' our Author understands not the Demonstration.

After this he comes to the solution of *Harvey's* Problem given by D. P. which must needs be also stollen, according to his ordinary way of speaking, and that from *Thurston* and *Borelli*; whose opinion (he says) is notwithstanding confuted by D. P. Now to advance and confute the very same Opinion is a thing incomprehensible to me, and only known to our Author: For proof of this he sets down a part of the 117. *Prop.* of the 2d. *part* of *Borelli's* Book *De motu Animalium*, by this Citation we have a clear example of the Dissertator's Ignorance, for what *Borelli* there writes, is just contrary to what *Bellini* says, and D. P. demonstrats. In a word it is false, being founded on the Ridiculous and absurd opinion of *Des-*

*Cartes*

*Cartes*, maintaining there can be no void, as appears by these words immediatly preceeding what our Author cites "*In partu, musculi intercostales & diaphragma moventur se contrahendo, hi vero contrahi non possunt quin subsequatur cavitatis pectoris ampliatio, quo facto necessario aer ambiens profluere & replere debet Bronchia & vesiculas pulmonis.* This is that ridiculous story, that the Ribs being thrust out doe force the Air to seek room elsewhere. An Opinion sufficiently refuted by many.

But the Dissertator goes on, and says that D. *P.* and *Borelli* only differ about the final, and agree about the Physical cause of Respiration: But this is plain nonsense, for Mr. *Newton* has taught us, that no man ever knew a Physical cause, neither will you find any mention of a final cause in this Dissertation of D. P's, who is not over fond of pedantick expressions or School terms. He has demonstrated the manner how respiration is performed exactly according to nature,

and modestlie refuted *Borelli*'s reasons, without giving him names.

But says he, Dr. *P*'s. notion of respiration is the same with *Bellini*'s; be it so: but *Bellini* only gives us this Proposition amongst several others in the beginning of his Book, but no demonstration, which D. *P.* has done very handsomely. It was a dull German objection which was lately made against Dr. *Gregory* in the *Acta Eruditorum Lypsiæ* that his *Catenaria* was no new thing, the Dr. owned frankely that the properties of the *Catenaria* were found out before, but that the demonstration was new, and he handsomely vindicated himself by the Example of *Archimedes* and the other famous ancient Geometers, who have given the Demonstration of things known before. And even the famous Sir *Newton* gave Demonstrations of our System of the World, which was known ever since *Aristarchus Samius* 's Days; But he has made it so sure and demonstrative, and so fil'd and polish'd it, that he deserves immortal

praise

Praise: and notwithstanding of all hints in *Caesalpinus*, *Columbus*, *Servetus* &c. about the Circulation of the Blood; yet *Harvey* who came after them, did so improve them, that he made all things plain, distinct and demonstrative, and, I think, by all men is now reckon'd the Inventor and Author of the Circulation of the Blood.

But after all, says our Author, what matters it in Medicine, whether the one or the other opinion be true? Indeed, truth is of no use to those, who do their business by lyes. Yet there are some men who are glad to know the secrets of Nature. It was *Borelli*'s design to find out Truths, and if at any time he hath miss'd on them, and *Bellini* or D. P. have corrected the matter, are they to be blam'd? Now suppose *Borelli* had been in the Right, is he to be laugh't at, because he has not told the Dissertator what advantage his discovery brings to a Physician? Yet this is all he hectors D. P. with; and even D. P. has demonstrated the use of

Re-

Respiration by showing what Influence it hath in preserving the life of an Animal.

It is worth the pains of observing, that when he cannot deny the Truth of any of the propositions advanc'd by D. P. he says they are useless in Medicine; and so they may be to him, and those who cannot know their use, and cannot deduce consequences from plain truths: But we have shown several uses of them already, and perhaps they may have a Thousand more which we know not, but may be discovered by Posterity. At the same rate one might have quarrell'd *Euclide*'s *Elements*, when they were first publish'd, and said that they were jejune and idle truths, and contain'd nothing that conduces to the Improvement of Sciences; And certainly they had been so, if there had not been better heads to apply them than our Author. Yet by all men of Sense they always were esteem'd solid Demonstrations, and the foundation of all Geometry and certain Sciences.

This

This is indeed to discourage all Inventions with a Witness, and so strike at the Root of all Mathematical Learning.

But here once for all, I must advertise the Reader, that the Author's speeches against the usefulness of D. P's inventions in Medicine are nothing but the old Cant of *Apollo Mathematicus*, which he himself sufficiently Laugh'd at, *vid. Pag.* 59. *If the professor would be so kind as to assist us with Mathematical Spectacles to see the Animal Spirits, the Form, Figure and Contexture of their parts, and all the small filaments and Pores by which all the Secretions are made, we would thank him for the favour, and then think of following these Star-gazers. But though he could make our Bodies as transparent as Chrystal of the Rock, so that we could see with the naked eye, all the order and Harmony of the Microcosm, as well as we do the motions of a Clock, we should by this means have a more curious and useless speculation, but never a whit more use-*

*ful or ſucceſsfull in practice; Phyſick would ſtill be a conjectural Art, and Phyſicians ſtill gueſſers, and men dye after the old faſhion, and Mathematicians miſtaken, and Fools ſpeak nonſenſe.* A great number of paſſages to the ſame purpoſe might be added, which for brevity I omitt. And indeed it hath been well ſaid by ſome ingenious Phyſicians, that this Diſſertation is nothing but *Apollo Mathematicus* put into Pedantick Latin.

Next follows the examination of the third Diſſertation *De motu quo cibi rediguntur ad formam Sanguini reficiendo idoneam.* And here he takes notice of what D. P. hath taught only by the by about nutrition, who had ſhown it was done in a manner conform to other Secretions, and put the whole in a ſhort Mathematical dreſs, very far different from what our Author makes him ſay. Here he makes D. P. a Plagiary again in his taking the notion of Digeſtion by the muſcular motion of the Stomach from old *Eraſiſtratus*; a very great fault indeed,

but

but all we have of *Erasistratus* about this matter is in *Celsus*'s Preface, where speaking about the different opinions in digesting Meat in the Stomach, he says, *Et duce alij Erasistrato attrito cibum in ventre contendunt.* Now, he's very nimble at Stealing, that can make a discourse of several sheets out of this. But *Borelli* said it more plainly, says he: for my part I cannot see that neither, nor any body else, except the Dissertator. Why? Hath *Borelli* calculated the *Vires* of the Stomach, Diaphragm or *Musculi abdominis*, which D. P. hath done very exactly in a Mathematical manner? And by the force of these, the attrition and digestion of the meat are certainly performed. The next evidence against D. P. is Dr. *Brown*, a good Author indeed; however he hits on the opinion, as many others had done before him, Yet he does not give us any reason for it, and I do not believe, even our Author will think it more probable, because he has barely said it: And truely if the meer saying of a

thing carries demonstration in its bo-
som, then what the Dissertator says
Page 4th. must be a Demonstration
viz. *Id solum conantur ut Theorian*
*aut hypothesin quandam praxi suæ mo-*
*do accommodarent*, which I think un-
philosophical and unreasonable, that
a man should first do a thing, and then
give reasons for it afterwards; and in
Physick this may prove as dangerous
as in Politicks, first to hang a man, &
then to give the reasons.

And here the Dissertator brings in a
terrible objection against D. P. for
saying Drink, Spittle &c. are useless
in digesting Meat: It seems, he either
hath not read, or not understood that
Dissertation, else he might have been
sufficiently satisfied about that matter.
I shall direct him to the place for once
*vid. pag. 71. Verum de Salivæ facultate non opus est anxiè disserere vili & nulli non dicta, quam idcirco lectoribus hic apponere non fuit animus: Dentium quoque actionem omnibus notam memorare usum non est, aliaque etiam quæ Chyli opificium comitantur,*

qua-

*quæque omnium felicissime executus est doctissimus & candidissimus rei medicæ scriptor* D. Martinus Lister, *relicta aliis sola compilandi gloria.*

D. P. from what he hath demonstrated in this Dissertation had inferred, that an easie or gentle walking after meat was proper for Digestion, Our Author Laughs at this; It seems he thinks Musick and Dancing more fit: But D. P. must be hiss'd at for mentioning some things which we even Read in the *Schola Salernitana*; I suppose D. P's. inferences and conclusions are not the worse, because they are agreable to the common sense and experience of mankind.

The only remark our Author makes on the Dissertation *de Inventoribus*, is, that none but a mad-man would think that the Circulation of the Blood was known to *Hippocrates*. This is a civil way of speaking; I suppose *Vanderlinden*, *Drelincurt*, *&c.* were no mad-men, and did oft read *Hippocrates* in the Original, and they thought the Circulation of the Blood was known to

to him: But besides, the Dissertator cannot but know, that this discourse was Writen on purpose to serve a friend; and after all, it contains a great many gentile and uncommon things, both useful in Medicine and other Sciences.

To follow his Method, we shall examin what he says about the Dissertation *De Circulatione in Animalibus genitis & non genitis.* In the first place he tells us that D. P's account *That an Animal cannot be produced Mechanically* is taken from *Bellini, Malbranch &c*, I wish he had pointed at the places; for those who have read these Authors with as great Attention as he, can find no such thing. From this Demonstration that Animals are not produc'd Mechanically, D. P. Justly infers, That the liquor of the male carries into the egg the Animal already alive. Here the Dissertator makes a long discourse on the common known changes on Worms, Flies and Seeds of Plants, and asks *D. P.* what Male's Liquor those Seeds came from; Do's the ask-

asking a ridiculous question infringe a Demonstration? no certainly: But our Author should have considered, that if there is any necessity of a male there, It must be the Plant, seeing the Earth supplies the place of a Mother; tho' *D.* P. is not concern'd in such trifles. Then, says he, *Leevenhoeck* indeed Writes that by the help of Microscops he sees Animals in the Liquor of the Males: But this, says the Dissertator, is only a dream, for what he saw is only the Wrestling or Justling and Distraction of some parts of the Liquor turning thinner than the rest. Thus he denies any trust to Microscopes, and refutes & renounces what he had said a few lines before, *viz.* that *Malpighi* hath by the help of Microscopes seen the Lineaments of a Chicken in a wind egg; But *D.* P. is not concern'd, whither these Animals are visible or not by Microscopes, he having proven demonstratively, that Animals are all existent from the Creation, and consequently that there is a God. Here our Author in a Pedantick manner exaggerats the dif-

fi-

ficulties, that may stop the Animal in it's way towards the Egg in the Female's Womb. He may inlarge about this as long as he pleases, for a little Animal will make it's way as easily to the Egg, as that part of the Male's Liquor, which our Author from others calls the *Aura Seminalis*, which they think impregnats the egg.

Next our Author comes to Examin what D. P. has demonstrated concerning the effects of Opium &c. He confesses that the excellent *Lemma* (he should have said *Corollary*) *Quod in omni morbo cujus phænomena æquè possunt oriri à motu liquidi per nervos venasq; sublato, semper putandum sit potius peccari intra arterias quam intra nervos aut venas*, was first discovered as well as demonstrated by D. P. and that it seems to be true *primo intuitu*. Let him view it as long as he pleases he'll find it of eternal truth. But, says he, what advantage does it bring to Medicine? I'm quite wearied with teaching the use of things so obvious, and plainly delivered, even in the same Dissertation, *vid.* §. 18. But

the

the Dissertator alleges the Explication given by D. P. of the way that Sleep happens both Naturaly and Artificialy, is not satisfeing; for answer to this, D. P. does not at all treat of natural Sleep but of that which attends those Diseases, which, Dr. *Willis* and *Etmuler* say, are produc'd by some thing acting on the Spirits like Opium. Now since the Dissertator thought fit to show his opinion of natural Sleep, which is the only thing he pretends to be new, and his own, in his Folio Book, we shall hear him. *Natural Sleep*, says he, *is a remission of the fibres of those Muscles which have opposit ones, and which are bent in persons while they are awake, and open to give passage to the Spirits, but are quite shut up in those that are asleep.* Now to Imitate our Author's way, this is stollen from *De la Forge* and Dr. *Willis*. In the next place it is horrid nonsense; for it is plain, that in Sleep the opposit Muscles of a finger are as much bent, as when a person is awake, and makes no motion

with

with his Finger; and I can assure this Author, that D. *P.* can demonstrat this Propoſition of *Bellini*, *that the Nerves are always in their natural State full of that Liquor, which we call the Animal Spirits*, which fairly Overturns the Diſſertators and his Friends ridiculous Opinion.

Let me here reaſon a little after our Author's manner. He has given us an explication of Sleep, but this is an old opinion, not becomeing a new Author, and ſet it down as his own, without nameing any from whom he had it, and has told it over and over amongſt his *Congerrones*, that he might acquire the name of a Learn'd man and an able Author: But tho' it were his own, what is the uſe of it in Phyſick? Is the practice of Medicine Improv'd by it? or are there found out by the help of this Invention about Sleep, any better Remedies in cureing Lethargies, Apoplexies and ſuch like Diſeaſes, than what were known to D. *P.* and others before?

At

at last he becomes so good natur'd, o confess, that all Lethargick Diseas- may be very well explained by a mpression of the Arteries in the Brain, the rarefaction of the Blood, or any her obstructing cause; but then he ds, D. P. has stolen this from *Bel-i*, who extended the case much ther: But he has not consider'd at D. P's. design was to shew the e of his Corollary, by applying it ly to the *affectus soporosi*, which oceeded from a cause within the ells, and to carrie it no further, s he plainly hath told in the begin- g of the 12. *Paragraph*; And tho' is be *Bellini's* Doctrine, yet D. P. s demonstrated it, neither has *Bel-ni* medled with this matter, upon ch a view as D. P. hath done: He ath not at all explain'd any thing bout *Opium*, nor shown the mischief hat attends giving Spirits & volatile alts in such cases, which D. P. hath one.

Here the Dissertator asks, if any mous Physician ever gave volatile

Salts or Spirits in Apoplexies? I answer *Etmullerus*, who is highly esteem did so. *Vid. Cap. 11. De Apoplex.* But, he says, it was only given in small quantities, which might stimulat and do no more. Every body knows that small quantity will not stimulat, ye volatile Salts receiv'd into the Bloo never do so, how great so ever th Quantity be, else the Blood it sel would stimulat.

At last he comes to examin D. P Dissertation *De Curatione Febrium quæ per Evacuationes instituitur.* He says that *D. P.* thinks, that there may be some Fevers cured without evacuations, because he said, *Solum enim inquiritur quænam evacuatio vel secretio deberet eligi in curandis Febribus, si ulla foret eligenda*, whereas 'tis plain, the Doctor could have no other meaning than, that after taking Blood and Vomiting in Fevers, if the Distemper goes on, and so gives either occasion or necessity of any other evacuation, the way of Sweating is better than that of Purging. The Dif-

fer-

Dissertator here most irreligiously swears, "if *Jupiter* himself (he means the true and supream God) should promise to cure Fevers without evacuations, he would not believe him. This is bold impiety! But why? Has he never seen *Hectick Fevers* Cured by the *Jesuit's Bark* and the *Antihecticum Poterii*? and they are so far from making any Evacuations, that they quite take away the sensible evacuation of Sweating, and augment no other while the Fever lasts. I suppose our Author knows D. P's. Design in writing this Dissertation was, that because Dr. *Sydenham* in *England*, and some inconsiderable People here, pretended that the only way of Cureing Fevers, was by Purging: Now D. P. knowing what was evacuated by Purging, as well as by Sweating, comes mostly from the Blood, therefore by an easie and exact Calculation, he demonstrated, that Fevers could be more easily & much better cured by Sweating than Purging: But he also tells, what the first and fittest thing to be done is,

when the Humours are ſtrugling in th
ſtomach or *primæ viæ*, is to Vomit
( ſuppoſing Blood firſt to be lett ) an
after this to allow the Perſpiration t
be augmented, which nature very o
does of it's own accord, and can ver
well be aſſiſted by Art; and it's know
by experience that the *Criſe* of con
tinu'd Fevers, for the moſt part fall
out no other way than by Sweating.

Here the Diſſertator falls to ask ſome queſtions again, and inquire what way D. P. can make the *matter* paſs through the ſmall Glands of the Skin; that is, *Can* D. P. *make a man Sweat?* This is an excellent queſtion to ſtand againſt a Demonſtration; and I ſhall let him be taught the truth of this by common ſenſe and experience. Our Author here acknowledges, that D. P. has indeed demonſtrated a propoſition of *Bellini*'s about perſpiration, but, as his way is, he ask's what uſe this is in Phyſick? Really, the Diſſertator ſhould have ſtudied better, and then he would not have troubled us with a Pamphlet ſtuff'd, with nothing

but

but Queſtions and idle Tales: Yet I'll once more anſwer him. Every one knows that Bathing is of ancient uſe in cureing ſome Diſeaſes. *Bellini* has demonſtrated how reaſonable this practice is, tho' the Liquor we bath in, went no farther than the out ſide of the Skin: But ſays *Bellini*, if the Liquor paſſes further, then we may expect good and admirable effects and ſudden too; which he proves *Pag.* 146. *de Sanguinis miſſione*. And then he conſiders, if the natural perſpiration that comes out from the Skin, can hinder the Penetration of the Liquor of the Bath; and his opinion is, it cannot; becauſe the quantity or weight (and it's force is proportion'd to it's weight) of Perſpiration, that comes every minut, is but the 12 hundredth part of the place it comes from. This he ſays, follows from what he had ſaid, and prov'd in a Book not then Printed, and not yet demonſtrated by him. *D.* P. has demonſtrated it now, and conſequently has ſhown the great uſefulneſs of Baths, hitherto believ'd

by some, but not certainly known. This I hope is of use in Medicine.

The Dissertator is not content to gain a single Victory over *D. P.* as he fancies, but like another *Don Quixot*, he deals blows about him, and furiously attacques the learned Author of the *New Theory of Fevers*. Well, says he, 'tis write *Barbaro Idiomate*, I know not what he means by this *Barbarum Idioma*, except that he thinks it's writ in a Mathematical way; If a man write after a Mathematical manner, he must make use of Mathematical Terms; and the Terms of Art in all Sciences, *viz.* Physicks, Law and Mathematicks &c. cannot be made smooth English; But, who made our Author so nice a Critick in the English Tongue? No body, I'm sure, would know it either by his writing or speaking. Well, the common charge goes on, This Theory is taken out of *Borelli* and *Bellini*, But, I fancy, he'll have every thing which he does not understand, to be taken from these Authors. Where, pray! does *Borelli* or

*Bel-*

*Bellini* assign the cause of Fevers, which the Theorist makes an obstruction of the Glands in *acute*, and a dilatation in *slow Fevers*? Where, pray, has any of these Authors explain'd the Laws of Secretion, or the Operation of Vomitive and Purgative Medicines, after that Mechanical way? Or where is the Operation of Mercury, by an exact Mathematical Calculation, made plain and evident? Why? Is the *Essay* about the Improvement of the Theory of Medicine, and several Calculations about Perspiration stollen also? He who says so, I am confident, neither understands *Borelli*, *Bellini*, nor the *New Theory of Fevers*.

I should be very sorry, if the Learn'd Author of the *Theory* should think himself oblig'd, to chase our Dissenter, and answer his Impertinent ribaldry (for he does not so much as pretend to reasoning) since he's now imploy'd about more serious studies, which may prove useful to Mankind. We expect with Impatience from the

Press

Press, his Book about the *Inverse Method of Fluxions*, which is the most hard and difficult part of Mathematicks. The *Marq. de l'Hospital* for his *Analyse des infiniment Petits*, which is only the direct Method, tho it was known and invented before, by the incomparable Mr. *Newton*, yet for his giving rules, and illustrating them by Problems, he's justly reckon'd amongst the most Learn'd Mathematicians of this Age. Now the *Inverse method*, is a much more hard and laborious task, and will be of infinit use in natural Philosophie and Medicine, and this work seems rather to be the fruits of many years close study in Mathematicks, than the product of a young man, at his first appearance in the world, and will clearly demonstrat, that he's neither *Pingui ingenio*, nor *Rudis ac impeditus Auctor*, as the Dissertator is pleas'd to call him. I shall add here a part of a Letter lately Written by him, to D. *P.* on this subject. *But I advise you, Doctor, not to trouble your head about him, who*

*now*

*now intends to write againſt you; Do not delay the republiſhing your Book a minut for ſuch conſiderations, it were a lybell on your Writings to ſully them with ſuch pityful ſtuff: Even one with a* Barbarum idioma *like mine (for ſo they tell me he Complements me) would be ſufficient againſt him,* Et quærens illidere dentem offendet ſolido. *I ſay, he neither underſtands your Book nor mine fully; For example, let him give the inveſtigation of this problem in your Book: To find the nature of the curve canal, which a Fluid would naturaly form to it ſelf: Or theſe in mine; To find the truncated Cone of the leaſt reſiſtence, when mov'd in a Fluid, from the Baſe toward the Apex. To demonſtrat that the Contact of Spheres, are leſs than thoſe of any other Solids whatſomever. To ſhow the inveſtigation and Analyticks of three or four Problems in the additions about Perſpiration.*

Now after all, Our Diſſertator acknowledges almoſt all the Propoſitions advanc'd by D. P. in his Diſſertations

tations, to be true and Solidly demonstrated, but complains he cannot understand the use of them; this indeed may be true and demonstrated also: But whose fault is it, that our Author cannot understand demonstrations, or draw conclusions from well proven Theories? In the next place, for all his Vanity, he does not pretend to any thing new, or his own, except the explication of Sleep; Which, we have proven to be stollen and nonsense to the boot: So in this large *Folio*, I see nothing but some Pedantick Phrases, indecent Reflexions, and silly *Ironies* against D. *P.*, which serve for no other use, that I know, but clearly to discover, our Author's malice and ignorance. After all this Pother about finding out things usefull in Medicine, I would gladly know, what Improvements the Dissertator has made either in the Theory, or practice of Physick: It must certainly be, either by his privat Practice, or publick writings. I shall not examin his privat practice, for this were

were too invidious; and for his publick Writings, I know none, except he is the Author of that scurvy sheet about Vomiting in Fevers, which every body Laugh'd at, In which he blunder'd in his reasonings, bungled his Authorities, and as a very good Author lately says, *He imitated the practice of better Physicians, but could not imitate their reasonings, and so spoil'd a good cause by bad arguments.* For my part, I had rather be handsomly mistaken, than be so dully in the right, even allowing him to be so.

I have follow'd the Dissertator through this long Scene of Impertinence, and am come now to the last *Paragraph*: He turns so quarrelsome here, that he cannot agree with himself, I doe not see how any body else can. He says, *he's not ἀγεωμέτρητος*: I suppose, none will think him very skillful in Geometrie, who cannot distinguish betwixt a *Lemma* and a *Corollarie*, and who ridicules an excellent Rule, not invented (as he fancies *Pag.*6.) by D. *P.* but successfully

uſed by him and the beſt *Mathemati-cians*. However he confeſſes *Mathe-maticks are uſefull in Medicine, tho' of no uſe in curing of Diſeaſes*. This (me thinks) looks like a contradicti-on; but great *Genius's* are not ſubject to common ways of ſpeaking: One would think the deſign of Medicine is to cure Diſeaſes, and that which is uſefull in the one, muſt be ſo in the other. But, ſays he, other more uſe-full things are neglected, and the ſtreſs of the matter laid on the *Mathema-ticks*, which cannot anſwer the Thou-ſand part of the Problem about cure-ing of Diſeaſes. Why pray? Did D. *P.* reject the uſe of all Medicines, or did he pretend to cure Diſeaſes by ſcruples or drachms of Mathematicks, or with Problems and Propoſitions of *Euclide*? No body, I think, ever did imagine, or inſinuate this, except the Diſſertator, and his friend *Apollo Ma-thematicus*, who dealt more frankly, and altogether deny'd the uſe of Ma-thematicks in Medicine. But D. P. hath taught us, that we ought to un-

derſtand

derſtand the conſtitution of human bodies, the nature of Fluids, the Laws and manner of Secretion, and ſo by long experience, and exact obſervations, to form ſure and well fix'd Theories of Diſeaſes, from which we may draw uſeful conſequences, and learn to apply proper Medicaments in all Diſeaſes; and he who does ſo, cures ſurely and exactly; and he who does otherways, cures only by chance, and not by the rules of Art. But if he will not believe D. P. I refer him to Mr. *Newton* in his Preface to his *Prin. Phil. Nat. Math. Omnis enim Philoſophiæ difficultas in eo verſari videtur, ut à phænomenis motuum inveſtigemus vires naturæ, deinde ab his viribus demonſtremus phænomena reliqua.*

Some years agoe, at the famous Univerſity of *Leyden*, I had the good Fortune to be taught the Elements of Medicine by D. P. and to defend ſeveral of theſe Diſſertations there. I heard the Objections of Learn'd men diſcreetly made; and they were

all

sufficiently satisfied with the answers. I Confess, I owe D. P. all the duty and kindness, that a Scholar can express to a Master. I got good advice and instructions from him then, and have received a great many obligations since that time; which make me contribute all I can, to vindicat the truth, and make a just defence of my Master. I design always to be grateful, and acknowlege favours, and I think Ingratitude the basest and worst of Vices.

To Conclude. If the Dissertator be frankely put in mind of his frailties, he's to blame for it himself, who was the first Aggressor, and after so undue and unmannerly a way, attacqued one of so great merit and worth, whom he ought rather to have defended, and to whom he owes so many and great Obligations. But besides, when those needie Squables and Quarrels amongs Physicians in this place seem'd to be extinguish'd, at least laid aside, he begins a new War, raises Feuds and Animosities amongst

those

those who should be United, gives occasion to their Enemies to Rejoyce at their Divisions; and in a word, makes indifferent persons who understand nothing of the Trade, Laugh at all Physicians, and even despise the excellent Art of Medicine it self.

---

*Remember* Milo's *end,*
*Wedg'd in that timber which he strove to rend.*

---

# *FINIS.*

MVSEVM
BRITAN
NICVM